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U.S. ENVIRONMENTAL PROTECTION AGENCY

FACT SHEET

SHAFFER EQUIPMENT SITE INVESTIGATION AND ASSOCIATED OFFSITE INVESTIGATIONS

April 1991

SUMMARY -- SHAFFER EQUIPMENT AND RELATED SITES

The Shaffer Equipment Site in Minden, Fayette County, West Virginia is an inactive facility that formerly processed electrical parts, such as transformers and capacitors. Between 1970 and 1985, oils from the electrical parts were spilled or dumped on the ground at the site. Many of these oils contained polychlorinated biphenols (PCBs) which are considered a potential human health threat and a possible carcinogen.

The Shaffer Equipment Site lies in the flood plain of Arbuckle Creek, a tributary to the New River. Over the years, flood conditions apparently carried contaminated soils off site. Periodically, Arbuckle Creek was dredged, and the recovered materials were reportedly dumped or used as fill at several locations in the Minden vicinity leading to concern that the dredged materials may have contained elevated quantities of PCBs.

Since 1984, EPA has performed two separate Removal Actions at the Shaffer Equipment Site and six Site Investigations at offsite locations identified by members of a local citizens' group as areas of suspected contamination related to the PCB problem at the Shaffer Equipment Site. This work has been performed under EPA's Superfund Program. Although this program is extensive, it was not designed to remedy all of the nation's waste problems. Therefore, it is important to understand the intent of Superfund, as defined by Congress.

SUPERFUND -- AN OVERVIEW

Superfund is the Federal program for protecting human health and the environment from uncontrolled releases of hazardous substances. In 1980, Congress passed the Comprehensive Environmental Response, Compensation, and Liability Act, known as CERCLA. CERCLA established a tax on the petroleum and chemical industries that provided a trust fund of $1.6 billion dollars to be used over the next five years to cleanup or control the nation's worst hazardous waste sites. This trust fund became known as Superfund.

CERCLA was amended in 1986 when Congress passed the Superfund Amendments and Reauthorization Act (SARA). SARA extended CERCLA for five more years and added $8.5 billion dollars to the trust

fund, broadening the tax base of the fund to include taxes on certain chemical imports, an environmental tax on corporations, appropriations from general tax revenues, and monies collected from parties responsible for contamination.

In November 1990, CERCLA was reauthorized again, extending Superfund through September 1994 and providing an additional $5.1 billion dollars. **Under CERCLA, Superfund monies can only be used for two primary reasons:**

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- Addressing imminent threats to human health and the environment, or
- Conducting long-term cleanup at the most serious hazardous waste sites in the country.

THE SUPERFUND DECISION-MAKING PROCESS

The Superfund decision-making process is guided by the National Contingency Plan (NCP), the Hazard Ranking System (HRS) and the 90-Day Study.

The NCP is the regulation that activates CERCLA. In the NCP, Congress defined EPA's responsibilities and those of other Federal agencies, the States, local governments, and private parties. The NCP establishes the blueprint for the entire cleanup process from the discovery of a site to its cleanup and removal from EPA's cleanup list. The primary goals of the NCP are:

1) Protection of human health and the environment,
2) Waste minimization, and
3) Improvement of waste management capabilities through the development of new technologies.

EPA's inventory of potential hazardous waste sites currently includes more than 32,000 locations. Congress has always realized that the Federal government could not and should not be held responsible for remediating all of these sites. Through CERCLA, Congress directed EPA to set priorities and establish a list of the most serious hazardous waste sites. To establish this list, known as the National Priorities List (NPL), EPA developed the **Hazard Ranking System (HRS). The HRS:**

1) Identifies the threats posed by each site,
2) Assigns a numerical value to those threats, and
3) Compares the seriousness of the threats identified at each site against the threats associated with other sites.

HRS scores are based on whether contaminants have spread, or have the potential to spread, through ground water, surface water, direct contact, or air. Only sites scoring 28.5 or higher are proposed for the NPL. Those sites that are proposed are opened to public comment before they are "finalized" on the NPL. Sites proposed to the NPL become eligible for long-term remedial

investigation by the Superfund remedial program. Once "finalized" sites also become eligible for Superfund cleanup. The NPL currently includes 1,236 sites. This list is expected to grow by nearly 100 additional sites each year.

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The 90-Day Study refers to EPA's 1989 analysis of its own Superfund program and resulted from criticism that cleanup activities were taking too long. The study developed a strategy to improve the program, and this strategy was incorporated into the Revised NCP, in February 1990. The strategy included four environmental goals:

1) Make responsible parties pay for cleanup,
2) Address the most serious sites first,
3) Cleanup the worst threats at the worst sites first, and
4) Develop and use innovative technologies.

To achieve these goals, the study recommended improving efficiency within the program, increasing public involvement, enhancing involvement of the States and other groups, and monitoring sites after cleanup to ensure they stay safe.

THE SUPERFUND PROCESS

Under Superfund, EPA investigates potential hazardous waste sites, stabilizes or eliminates immediate threats, and remediates long-term threats. The Superfund process involves five separate programs: **1)** Site Assessment, **2)** Removal, **3)** Remedial, **4)** Enforcement, and **5)** Cost-Recovery.

Upon discovery, a site may be investigated by either EPA or EPA's counterpart in State government. If the investigating agency determines an emergency situation exists and EPA's assistance is required, the site will be referred to EPA's Removal program.

The Removal Progam is able to respond immediately to any situation that poses an imminent threat to human health or the environment. Imminent threats include emergencies, potential emergencies, and situations that could be harmful to human health or the environment over a short period of time. Some examples include the threat of fire, explosion, or exposure to very high levels of potentially damaging hazardous substances (acute exposure). Removals that are not emergencies, but must be conducted in a timely manner, are called Planned Removals. Removal program goals are:

- To stabilize conditions at a site and
- To significantly reduce or eliminate hazards.

The Site Assessment Program, sometimes called the Pre-Remedial Program, determines whether situations reported to EPA represent threats to public health or to the environment. Following discovery of a site, the Site Assessment Program performs a Preliminary Assessment and, if necessary, a Site Investigation. If no significant threat is found, "No Further Action" is recommended. If a threat seems serious, further study is

recommended. The Hazard Ranking System is applied to the most threatening siteswhich receive a high score. These sites are proposed to the NPL for further investigation, and possibly cleanup, by the Remedial Program. Of course, any emergency situations are referred to the Removal Program, at once.
Site Assessment Program goals include:

- Determining which sites need investigation and
- Prioritizing sites so that the most serious situations get attention first.
- Proposing sites to the NPL.

The Remedial Program conducts Remedial Investigations (RIs) at sites proposed to or finalized on the NPL. RIs are intensive studies that seek to determine the nature and extent of contamination and identify the physical characteristics of a site. Information from an RI is used to develop a Feasibility Study (FS) that helps to determine what can be done to cleanup a site. Only sites that are finalized on the NPL may progress to the FS stage and subsequent cleanup. Private industry and States governments play a very large part in the Remedial Program. Remedial Program Goals include:

- Protection of human health and the environment,
- Compliance with other Federal and State environmental regulations,
- Long-term effectiveness or permanence, and
- Reduction of toxicity, mobility, or volume of wastes.

The Enforcement and Cost-Recovery Programs seek to identify all parties responsible for polluting the environment and to cause them to conduct cleanup actions or to pay for the cost of remedial activities. Responsible party cleanups are conducted to EPA standards under EPA supervision.

ADDITIONAL INFORMATION
Additional information about Superfund or about the Shaffer Equipment Site may be obtained by contacting:

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PUBLIC MEETING
to discuss
SHAFFER EQUIPMENT SITE INVESTIGATION
and
SIX RELATED OFFSITE INVESTIGATIONS

April 11, 1991

WELCOME AND OVERVIEW
Carrie Deitzel
Community Relations Coordinator

Overview will briefly summarize EPA Removal, Site Assessment, and Remedial Programs, including program objectives, capabilities, and limitations.

REMOVAL ACTIVITIES
Bob Caron
On-Scene Coordinator

Summary of EPA removal actions at the Shaffer site, emphasizing activities conducted since last Spring 1990.

SITE ASSESSMENT ACTIVITIES
Ben Mykijewycz
Site Investigating Officer

Summary of EPA site assessment activities conducted since last Spring 1990 at the Shaffer site and in six offsite areas.

QUESTION AND ANSWER SESSION
Panel of Experts:

U.S. Environmental Protection Agency (EPA)

Bob Caron, On-Scene Coordinator - Removal Program Chief
Greg Crystal, Removal Program Section
Carrie Deitzel, Community Relations Coordinator
Ray George, State Liaison Officer - West Virginia
Dawn Ioven, Toxicologist
Zelma Maldonado, Site Invesigating Officer - Site Assessment
Ben Mykijewycz, Site Assessment Section Chief

Agency for Toxic Substances and Disease Registry (ATSDR)
Charles Walters, Representative - Region III

West Virginia Department of Environmental Health Services
Joseph Schock, Director